

QUESTION 7: PURPOSE OF EXPERIMENT

Space Exploration Holdings, LLC (“SpaceX”) has a pending application for regular authority to operate a satellite-based direct-to-cellular system to provide Supplemental Coverage from Space, which will bring ubiquitous connectivity to millions of American consumers in previously unserved and underserved regions and during emergencies.¹

In this experimental license application, SpaceX requests authority for limited testing of radio-frequency equipment on Long Term Evolution (“LTE”) Bands 2, 4, and 7 at its research labs in Sunnyvale, CA and Redmond, WA. The testing will occur in isolated indoors environments, comply with 3GPP specifications for Wideband Code Division Multiple Access (“WCDMA”), operate with a limited power (i.e., 250 mW) on a limited bandwidth up to 3.8 MHz, and transmit infrequently. These tests will enable SpaceX to test and refine its SCS capabilities.

SpaceX will conduct its experimental operations on an unprotected and nonharmful interference basis. SpaceX will not cause harmful interference to and will not claim protection from interference caused to it by any other lawfully operating station. Further, SpaceX will not conduct any commercial operations under this experimental license.

In the extremely unlikely event that harmful interference should occur due to experimental transmissions, SpaceX will take all reasonable steps to eliminate the interference. Should an issue arise, SpaceX can be reached at satellite-operators-pager@spacex.com, which links to the pagers of appropriate technical personnel 24/7/365.

SpaceX’s proposed experimental operations would serve the public interest. Supplemental coverage of terrestrial networks from space stands to benefit millions of Americans and billions of people around the world. Supplemental coverage will also serve a wide array of beneficial use cases, from remote connectivity and emergency response to the growing market for Internet of Things devices and associated services. Testing and improving its capabilities will allow SpaceX to maximize the public interest benefit of its operations. SpaceX urges the Commission to expeditiously approve its proposed experimental testing license.

¹ See Application for Modification of Authorization for the SpaceX Gen2 NGSO Satellite System to Add a Direct-to-Cellular System, ICFS File No. SAT-MOD-20230207-00021 (Feb. 7, 2023). See also Single Network Future: Supplemental Coverage from Space, FCC 23-22, ¶ 1 (rel. Mar. 17, 2023).